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Planter's Guide

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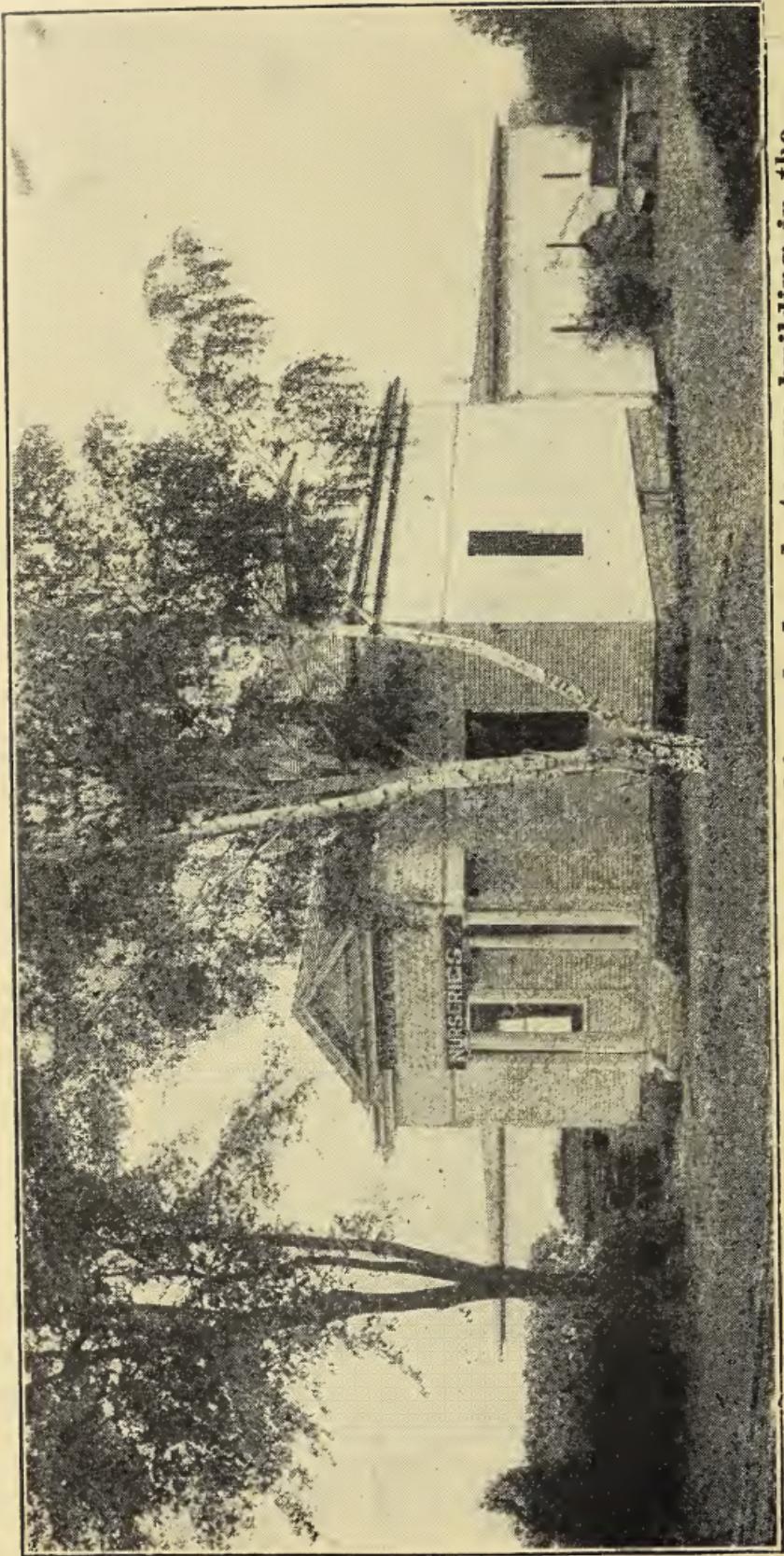


Established 1887

W. H. EDDY, Prop.

Howard Lake, Minnesota

Representatives Wanted
Write Us for Selling Terms



Our office in the foreground, with packing shed and storage building in the background. This building is 90 feet square.

Instructive and Descriptive
CATALOGUE

**Howard Lake & Victor
Nurseries**

**W. H. EDDY, Proprietor
Howard Lake, - - - Minnesota**

HOWARD LAKE & VICTOR NURSERIES

THE PLANTER'S GUIDE

This guide has been made as short and to the point as possible and at the same time cover all items which are of most vital importance to the planter.

Many of the older varieties have been left out as we are now growing newer introductions which have more desirable qualities. These newer varieties have been all thoroughly tested out before they are offered for sale and we feel justified in recommending them to our customers as varieties that are of the very best.

It is of the greatest importance that you select varieties which will be of the greatest usefulness to you. This we realize is the foundation of your success and is an advertisement towards the planting of our plants and trees.

LANDSCAPE SERVICE

Our landscape service department is in a position to furnish plans at an economical figure and give our clients the very highest quality of service along this line. In case you are interested in making some improvements in landscaping, write us for our terms.

W. H. EDDY,
Proprietor.

INFORMATION

The material included in this guide is taken from our latest and best experiences in Horticulture varieties and methods.

We wish to commend Mr. W. H. Alderman and his staff for the great help which they have done by the introduction of new

hardy varieties and information which they have given for the improvement of Horticulture in the Northwest.

Much of the information, included in this guide, has been taken from our state Horticultural Department of the University of Minnesota. We believe the latest up-to-date information from this source is what the planter should use. This experimental station is the largest and most extensive in the Northwest and is certainly giving out important information to the people of this section of the United States and Canada.

GOOD PACKING

We aim to pack our trees and plants in such a way that they will be as fresh when unpacked, as when they were sent out from the nursery. We believe that it pays us to pay more freight and express for additional packing material and have our stock arrive fresh and in the best of shape for planting.

REASONABLE PRICES

The quality of trees that you get from the Howard Lake & Victor Nurseries will make them cheap to you regardless of the price you pay. We sell nothing but first class trees and of the highest quality. Our inferior trees are thrown on the brush pile as we consider them worthless.

Why waste your time and land by planting trees of an inferior value? We grow nothing but the hardiest varieties, which are adapted to the severe climatic conditions of the Northwest.

Why buy southern trees—because they are cheap? They are worthless to you.

OUR TERMS ARE STRICTLY CASH

OUR RATES

We furnish six at dozen rates, 50 at 100 rates and 500 at 1,000 rates.

CAUTION IN ORDERING

Understand the size of the trees and plants that you are ordering and order accordingly.

ORDER EARLY

Place your order early in the year for the following spring or fall, as we sometimes run out of certain varieties and it may be these varieties that you want. The early orders are always filled first.

GUARANTEE

We exercise the greatest care in having all our stock true to name, and should any of it prove otherwise, we will replace the same free of charge or refund the original purchase price. In case trees are given the proper care, when received for planting and planted correctly, we will replace them free of charge first season in case they die and we are notified before September first, except evergreens, strawberry plants and bedding plants which we replace at one-half price.

DELAYS

In case stock has been shipped and you do not receive it in due season advise your railway agent to have it traced and notify us at once. We, in turn, will have it traced from this end.

VARIETIES

The hardiest and most valuable varieties are included in this guide. In case you should be interested in some varieties that are not included in this guide and believe them to be of value for planting write us or see one of our salesmen as we are growing all the hardy varieties for the Northwest and have on hand many varieties which you will not find in this booklet.

GENERAL INFORMATION

Care of Stock When Received

In case your order is received in bulk shipment, with many other orders, it is a good plan to protect the roots of the trees with a blanket until you get them home and can heel them in or place them in water. Trees should at all times be protected from wind and sun and be kept in a moist condition until ready to plant. The stock will be in the best of shape, when you receive it, and in case it cannot be planted at once, heel the bundle in the ground in good, moist soil. In case the weather or the soil are not right for planting, heel in the ground until conditions are favorable for planting. A cloudy day is best for planting especially for evergreens. Keep the trees in a good moist condition until ready to plant and you will have no trouble in making them grow.

FALL SHIPMENTS

In case you receive your order of trees in the fall, the first thing to do is to choose a well drained location and dig a trench large enough so that the trees can be completely covered. Remove all of the packing material and cut the bundle open. Place the larger trees in the bottom of the trench and the smaller trees on top. Cover the roots with about a foot of soil and the tops with four or five inches. Place some straw or manure over the top to prevent freezing and thawing. The advantage of receiving trees in the fall is that they are on hand in the spring during the busy season and can be planted to the best advantage of the trees as well as the planter. Trees will come through the winter in the best of shape if the above instructions are followed. Evergreens and strawberry plants should not be planted in the fall and cannot be carried over winter in the above manner.

FROZEN STOCK

Should any stock be received in a frozen condition DO NOT DISTURB order, but place the bundle or box in a moist cellar and let trees thaw out gradually. Do not unpack until frost is entirely out of trees.

PREPARING LAND

Fruit Trees and Windbreaks

Prepare land the same as you would for a corn crop, plowing in the fall or late summer and disk until soil is in a fine, pulverized condition. A piece of ground that has been used for a cultivated crop the year previous is better than a sod that has been plowed up. Do not plant near large trees or on low, poorly drained soil. Do not plant in sod. Cultivate trees the same as you would a corn crop for the first two or three years.

Small Fruits

Prepare land the same as for fruit trees, except work it up more thoroughly so the soil is in a well pulverized state at time of planting and should be kept cultivated, restrict the growth of weeds and you will get a good crop.

Planting in Sod

When it is necessary to plant in sod, as is the case when planting in the lawn, remove the sod for a radius of three feet around where tree is to be planted and spade the soil up. Keep this area cultivated and mulched.

Preparing Trees for Planting

Directions for fruit trees and forest trees are to cut back one-half of last year's growth and all branches or limbs which are not placed right. Leave the central leader of your tree somewhat longer than the side branches. Remove any branches that have been injured. Branches should be evenly

distributed about the main leader of the tree. Cut back the roots to a slanting cut, leaving a fresh clean cut at the end of every root. The top should be cut back, so that it is in proportion to the amount of roots on the tree or shrub. Large forest trees should be cut back until there is only the stub and a few smaller stubs running out from the main trunk. Some shrubs and hedge plants should be cut back to a few inches from the ground. Do not prune evergreens.

Setting of Trees and Plants

Dig the holes large enough so that the roots have plenty of room. Use the top soil for around the roots and stamp soil firmly about the roots. Fill in soil and then stamp firm and continue until tree is solid and cannot be pulled out. Plant trees from three to four inches deeper than they were planted in the nursery and leave a few inches of loose soil on top around tree. Leave the soil slanting towards the tree.

Be sure trees are kept in a moist condition while planting, this can be done by using a stone boat and barrel of water and removing one tree from the barrel at a time. In planting shrubs and other plants the same principles are used. The most vital point to keep in mind is to press the soil firmly around the roots.

Manuring

In most of our soils in this section of the country we would not advise plowing under manure in the spring or placing it in the holes where trees are to be planted as it will burn the roots in many cases and cause the death of the tree. Apply manure as a top dressing, which should be done, the fall after planting. This serves as a winter protection and at the same time furnishes nourishment for the tree when it starts growing the next spring.

APPLES

Orchards Properly Handled Give a Profit

The University of Minnesota in some data that they collected in regard to the orchards of Minnesota found that the average value per acre of orchard land was \$500.00. The returns from these orchards ranged from \$23.75 per acre, for a poorly managed orchard, to \$506.81, for a very well handled orchard. The properly located and well managed orchards are netting large returns to their owners. That there have been many failures in the past is true, by those who fail to realize that they cannot succeed with the old eastern and southern varieties and methods. It is true that the acres planted in apple trees, with the proper varieties and given the proper management, have netted to their owners larger profits than any agricultural product. Spray your trees, keep out the grass, weeds, rabbits and livestock and you will have success with your apple orchard.

How to Lay Out an Orchard

The economical method of laying out an orchard is the one that we are recommending to you. Its advantages are that all cultivating, plowing, spraying, etc., can be carried on with a team as the rows are given plenty of room and the space between the rows can be utilized by growing other crops as small fruits, etc.

The spacing is far enough between the rows so that another row can be started when the older trees are through bearing and by the time the time the old trees are to be removed you have another orchard bearing fruit. We must consider our orchard as a crop and plant varieties which will give us early large returns and when the trees show decay be satisfied to plant again.

NORTHERN PLAN OF SETTING AN ORCHARD

NORTH

30 to 35 feet



30 to 35 feet



WEST

Gooseberries Between the Trees



Vegetable Garden or Corn and Potatoes



Small Fruits of All Kinds
20 to 25 Feet Between the Trees



Currants Between the Trees

MSVE

SOUTH

Location of Orchard

The success of an orchard is greatly due to location. Select a north or northeast slope in preference to a south slope. The rows should run north and south as the trees protect one another from sun-scald by shading the tree to the north.

Select a soil that has good drainage, never plant an apple tree in a pocket, where water will stand after heavy rains, or in the early spring. Air drainage is very important, and is as essential to the apple tree as good soil drainage.

Do not plant in a grove or where the trees will be surrounded by larger trees. An abundance of free circulation of air and sunshine are very necessary for the proper ripening of the fruit. A clay bottom soil is the best, although there are many profitable orchards on lighter sandy soils.

Separate Varieties

The apple orchard should consist of apple trees only and in case of growing on a commercial basis restrict the number of varieties to as few as possible as you will have less trouble in marketing your fruit if the orchard consists of but one or two varieties. The home orchard should consist of a number of varieties in order to have on hand at all seasons of the year some variety of apples. Do not mix your plum orchard with the apple orchard.

How and When to Prune

When pruning always keep in mind your central axis and keep the limbs evenly distributed about it. The lower limbs should be two and a half feet from the ground. Cut out all branches that cross one another and open up the head of the tree to get air circulation and to give a high color to the fruit.

Leave plenty of branches on the south side of the trees to protect the trunk from sunscald. Make your cuts clean and close to the trunk. Never leave a stub. Never do heavy pruning when the foliage is on the tree. The best time to prune is when the tree is in a dormant condition. Wounds over one-half an inch in diameter should be covered with white lead paint.

SERIOUS DISEASES OF THE APPLE

Blight

This bacterial disease is one of the most serious throughout the Northwest and can be controlled by removing the diseased parts as soon as they are noticed on the tree. The symptoms of the disease are the wilting of the succulent new growth and finally the browning of the ends of the branches. Cankers are formed where the disease carries over winter. Control—by cutting off the diseased branches and disinfecting the tool used in carbolic acid after each cut. Be careful not to let the diseased branch touch any of the healthy growth. Burn these branches and keep the infected parts cut out as soon as they appear.

Sunscald

A mechanical injury caused by the sun striking the trunk of the tree and starting the sap in the early spring, which freezes and bursts the cells in the bark. Protection of the trunk of the tree by using tree protectors will prevent sunscald in young trees. Older trees should be protected on the south side by leaving plenty of branches. Young trees should be slanted to the southwest, when planted, as the head of the tree will then shade the trunk and protect it from the warm sun in early spring.

Crooked Trees

Some of the best varieties of orchard trees are the most crooked and may seem to some people the worst looking trees. It is unfortunate that there is a prejudice to crooked trees as they usually make the best orchard trees. These varieties are the spreading growers and are not so liable to break down when loaded with fruit. Some nurseries will not grow these varieties of trees, as it costs more to raise them and the customer is almost sure to find fault with them. Varieties which form crooked nursery trees are Early Strawberry and Minnesota Crab, Hibernal, Patten's Greening, Longfield, Malinda and Charlamoff. If you want straight trees don't order these varieties, but in this list you have some of the best varieties and we would advise planting them. If you get the variety you want don't be too particular about the straightness of the tree as this is a desirable characteristic, especially when you have your best varieties among this class.

SPRAY PROGRAM FOR MINNESOTA

Recommended by the Minnesota Horticultural Society:

Arsenic of lead, powdered, $1\frac{1}{2}$ pounds; lime sulphur, commercial liquid, 5 quarts; water, 50 gallons.

Cover every tree thoroughly and use a high pressure, 200 pounds or more is better than a low pressure. Be sure to spray at the right time.

Apples

First spray—When first flower buds show pink.

Pest controlled—Early stages of leaf eating caterpillars, curculio and scab.

Second spray—As soon as petals drop from flowers and before calyx-cup closes.

Pests controlled—Coddling moth, caterpillars and those listed under first spray.

Third spray—Last week of June or first week of July.

Pests controlled—Scab, apple maggot (railroad worm) and leaf eating insects.

Fourth spray—About July 20th.

Pests controlled—Scab, apple maggot, plum curculio and leaf eating insects.

Plums

First spray—Just before blossoms open.

Pests controlled—Curculios, plum pocket, blossom blight, twig blight.

Second spray—Just after petals fall.

Pests controlled—Curculios and brown rot.

Third spray—When plums are the size of small peas.

Pests controlled—Curculios and brown rot.

Fourth spray—When fruit first starts to color.

Pests controlled—Curculios and brown rot.

Special for Plant Lice

Nicotine sulphate, 40 per cent, $\frac{1}{2}$ pint; soap, $\frac{2}{3}$ pound; water, 50 gallons.

The first lice usually appear just as the buds are bursting. If very numerous, when applying regular sprays, nicotine sulphate may be added to the regular spray. It is more effective when used alone.

Currants and Gooseberries

Spray just before buds open, using lime sulphur—one part to nine parts of water. This is for plant lice and is to be used only before leaves come out as it is a strong spray. Controls plant lice.

Currant Worm

Spray—Use arsenate of lead at rate of 1½ pounds to 50 gallons water and 4-5-50 Bordeaux mixture as soon as the caterpillars are seen. Use Hellebore if spraying is needed when fruit is nearly mature. This may be dusted on leaves early in the morning.

Currant Borer

Prune out and burn infected canes before June first. Borers usually attack the canes that are two or more years old. Most of the fruit is borne on these canes. Do not prune out all old canes each season.

HOW TO SELECT VARIETIES

For the home orchard plant a good variety, selecting a few early cooking and eating apples, a few early and late crabs and a few fall apples. Make most of your selections of winter apples such as the Wealthy, Malinda, Red Wing, N. W. Greening and Anisim. In this way you should have apples the year around raised from your own orchard. We have tried out the varieties that we are recommending to you and will only enter a few of the very best varieties in this guide. Varieties which are the best for the far north are marked with a *.

APPLE VARIETIES

Anisim*

Hardy, free from blight, thrifty, upright grower; starts producing early and will produce an annual crop under favorable condition. Fruit of medium size and under, of a bright red color, which makes the tree very attractive when loaded with fruit. Quality good. A valuable fruit for the home orchard. Season, September to January.

Charlamoff*

Vary hardy, thrifty, spreading grower; early and regular bearer. Fruit similar to the Duchess but hangs to tree better. Without a doubt the best, early eating apple; wonderful quality. We recommend this variety as the best in its class and are entering it as such. Season, September.

Duchess*

Very hardy, free from blight, upright grower; very productive. Fruit, medium size, striped and acid. An early cooking apple that is well known. Fruit can be used when half grown. Season, September.

Hibernal*

Extremely hardy, thrifty, spreading grower; early bearer, in fact we have had trees four years from transplanting bear a bushel of apples. The most valuable tree we have for top working other varieties on, as it has strong crotches that will never break down. An annual bearer of large, irregular fruit with a handsome striping. Fruit very good for cooking, is very stringent and acid. Season, October to January.

Haralson*

Extremely hardy, upright to slightly spreading, free from blight; early, heavy bearer. Fruit of a dark red color, medium to large, fine flavor. Considered the best apple for Minnesota by the University of Minnesota Fruit Breeding Farm, where the apple was originated. This is without a doubt one of the coming varieties for the Northwest. Season, October to April or May.

Malinda*

Hardy, free from blight, thrifty, spreading grower; does not come into bearing until late, but bears heavily after it starts.

Fruit medium in size and of a yellow color, beautifully striped. Mild acid flavor and is especially good early in the spring for eating. By proper pruning this tree can be classed as one of our best shaped, as well as most productive of our winter varieties. Season, October to April.

Northwest Greening

A moderately, hardy variety, spreading, thrifty grower; fruit large green with blush, sub-acid, good quality, fine for eating in early spring. Season, November to April.

Patten's Greeing*

Extremely hardy, free from blight, even if planted among blighting varieties, a vigorous, spreading grower, early and abundant bearer. Fruit large, greenish yellow, a very good eating and cooking apple. Season, September to January.

Red Wing*

Extremely hardy, free from blight, upright growing in nursery but makes a spreading orchard tree, thrifty grower with large, dark green foliage. This tree has withstood the severe winters of Manitoba and bore good crops. Fruit large beautifully striped with a good red color. A proven winter apple for the Northwest of very good quality. Season, October to April.

Wealthy

Moderately hardy, blights somewhat, sunscalds quite readily, upright, thrifty grower, early and abundant producer. Fruit medium to large, of a very bright red color, quality excellent. The best commercial apple for Minnesota and will give wonderful results if top worked on Hibernal stock. An excellent desert apple. Season, October to January.

CRABS

Sour—Suitable for Cooking Transcendent*

Very hardy, early bearer, thrifty, spreading grower, blights some. An immense bearer and will not blight as readily in the northern part of the state, where it is the most valuable crab apple. Season, September.

Florence*

Very hardy, very early bearer, thrifty spreading grower, free from blight and takes the place of the Transcendent in the sections where the Transcendent blights badly. Fruit colored with splashes of bright red that make it conspicuous for a long distance when hanging on the tree. Profitable for the commercial orchard and valuable for the home orchard. Season, September and October.

Yellow Siberian*

The very hardiest of our crabs, upright, thrifty grower, free from blight, a profuse annual bearer, small yellow fruit, that is especially suitable for pickles. Season, September.

Sweet—Suitable for Desert Whitney*

Hardy, free from blight, very upright and thrifty grower that is doing well everywhere. Moderate producer. Fruit large for a crab, striped with red. Without a doubt the most popular apple in season, as it is sweet and has a very attractive flavor. The sauce from this apple is unexcelled and has a pear flavor. Season, September.

Early Strawberry*

Very hardy and a thrifty, spreading grower, blights somewhat, early and heavy pro-

ducer. Highly colored fruit of medium size, tender and delicious. Will not stand long shipments. A fine eating apple and very desirable for sweet pickles. Season, latter part of August to first part of September.

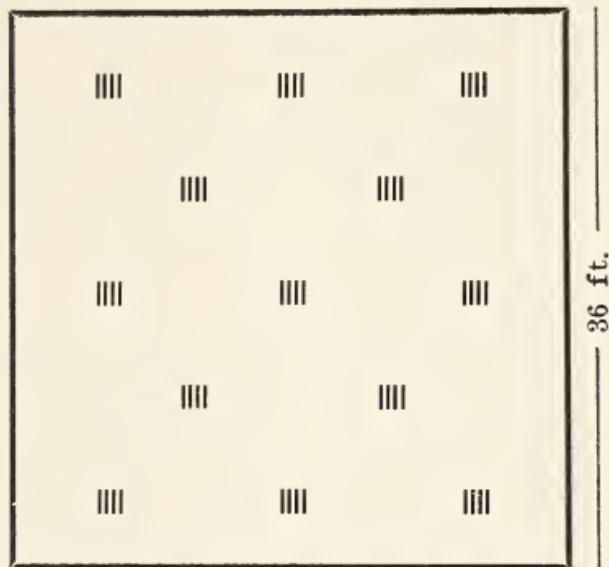
PLUMS

There is no fruit likely to give such genuine satisfaction as our improved tame plums. The plum is a native throughout the Northwest and literally speaking is "as hardy as an oak." Trees begin to bear very soon after planting and produce large crops of fruit of the highest excellency that can be used either for dessert or canning. No farm or village home, even in North Dakota and Montana, need be without this luscious fruit, which can be raised more easily in our climate than oranges in Florida. This fruit will rival the product of any garden on earth for its excellence.

How to Lay Out a Plum Orchard

The plum does best on a moist, rich soil that is well drained. Air drainage is very important in preventing the most serious disease of the plum, which is brown rot. This is especially true of the Hanson Hybrids and a location should be selected where there is plenty of air circulation. The trees should be planted in a group or clump in order to allow the free distribution of pollen from one flower to another, therefore, making all trees bear fruit more uniformly. To form a group of plum trees mark out a plot of ground 36 feet square, according to the following diagram. Select at least four varieties. A good selection for this group would be: One Loring Prize, two Underwood, two Monitor, two Waneta, two Sapa, two Opata, two Hanska.

36 ft.



This makes 13 trees to complete the group which is the right size for a home orchard. By this plan of setting, the pollen will be conveyed from tree to tree by the air currents and insects and a good set of fruit is insured. The above diagram is spaced right for the smaller growing varieties as the Sapa and Opata and should be larger, with spacing of 15 feet between the trees for the larger growing trees, as the New Minnesota plums the Loring Prize, etc. Our trees are all propagated on native plum stocks, which is a matter of vital importance, to insure a long-lived tree. Most of the southern and eastern nurseries are using peach and marianna roots to propagate their plums on, which greatly depreciates the reputation of this grand northern fruit.

PROF. HANSON'S NEW PLUMS

Plum Cherries

We have classified the following varieties as plum cherries due to their cherry characteristics. These trees will bear a crop the second year after planting and will continue bearing year after year an enormous

crop. The trees are of a dwarfish growing habit and can be planted twelve feet apart. They grow rank and spreading. Due to this characteristic they should be kept cut back, at least the succulent long whips which will break off when loaded with fruit.

Opata*

A cross between the sand cherry and burbank, tree erect and spreading. Very hardy in wood and bud. Fruit medium size, flesh green with a purple skin that is sweet and does not give the tart taste when canned. Quality very good. Ripens the later part of July. A valuable fruit that should be found in every orchard.

Sapa*

A cross between the sand cherry and the Japanese plum, Sultan. Style of tree very much similar to the Opata. A heavy bearer of excellent quality. Fruit of medium size. Flesh dark purple with a bluish skin. Excellent for desert or canning, sweet skin. Ripens the later part of July. This variety should be found in every home and commercial orchard.

OTHER VARIETIES BY HANSON

Hanska*

A cross between the native plum and *Prunus Simoni*, the large, firm-fleshed apricot plum of China. Tree is very hardy and a strong, upright grower. An early and heavy bearer. Fruit a very bright red and with a delicious apricot flavor. Flesh firm, will stand shipping any distance. Season, August.

Waneta*

This is without a doubt Prof. Hanson's best plum. It combines extreme hardiness with immense size, delicious flavor, beautiful red color, small pit and early bearing. Fruit the size and very much the shape of a hen's egg. Tree is erect, thrifty grower, of good size, when mature. This variety has been bearing fruit for a number of years throughout North Dakota and Northern Minnesota. Season, early August. We have had many reports from our customers on this plum as the largest and best they have ever grown.

THE NEW MINNESOTA PLUMS

The University of Minnesota Fruit Breeding Farm has certainly done some wonderful work in the development of new plum varieties for the Northwest. These plums are taking the places of many of the older standard varieties and show a marked improvement over them. For the special benefit of our customers we are going to give a detailed description of the varieties which have proven to be the best among this list.

Tonka No. 21*

Burbank and Wolf cross, tree of medium size and vigor, upright, spreading growth, hardy; fruit roundish, large dark red; flesh firm, juicy, sweet; quality, good; stone very small, free or nearly free from flesh at time of maturity, early to mid-season in ripening. Recommended for home and market. Very productive and will stand shipping.

Red Wing No. 12

Burbank and Wolf cross, quite hardy, tree upright, spreading and quite vigorous; fruit very large, firm, yellow, overlaid with

bright red; flesh, moderately juicy, sweet, quality, very good. Stone medium to large, entirely free. Ripens mid-season. An excellent variety for home use and an attractive market plum.

Monitor No. 70*

Triflora and American cross, tree medium in size but vigorous grower, produces a compact roundish, well-shaped head, hardy and productive; fruit is large, roundish, well colored, with dark dull red; flesh, firm, moderately juicy, sweet; quality, excellent; stone, medium in size, cling; ripens late mid-season. Very promising as a market plum as well as for the home orchard. We believe this to be the best of the new varieties by a slight margin.

Underwood No. 91*

Tree of large size and extremely vigorous, of spreading growth, forming a round head, very hardy and productive; fruit, large, roundish, oval, attractive red color; flesh, juicy, firm, hangs well to tree. Ripens very early and continuous over a long season. Stone, small, cling. Quality, excellent. Valuable for home and market.

STANDARD VARIETIES OF PLUMS

This list consists of a number of varieties that are both old and new, which we are growing in our nurseries and believe have a value to the planters of the Northwest.

Loring Prize

This is the plum originated by J. P. Vikla of Rice County, Minnesota, which received the prize of \$100.00 as the largest and best plum for the Northwest, because it is a good

commercial fruit, is good for canning, delicious to eat, has a small pit, is an attractive bright red color, and is bound to be in great demand at a good price when sold on the market. This plum will compete with any varieties shipped in from California and there is money in growing it. Trees that were grown in our nurseries have proven hardy and productive as far north as Todd County, Minnesota, where they have produced a crop the second year after planting and have borne a crop every year since they started bearing.

Terry*

The largest and best of the older standard varieties. Tree very hardy, upright grower, productive. Fruit large and of good quality, red; flesh, firm, considerable acidity, cling stone. Trees of this variety grown in our nurseries have proven hardy and productive under the severe climatic conditions found in eastern Montana and North Dakota.

CHERRIES

Cherries require an elevated, well drained soil with gentle southern slope. Lay out the orchard in rows twenty-five feet apart and set the trees twelve feet apart in the row. Cherries are coming to the front in the north and we now have a few varieties that have proven hardy and productive in Northern Minnesota and North Dakota. The proper way to grow cherries in a severe climate is to train them as bushes rather than trees. In this way the hardiness is increased and by renewing the older limbs with the younger sprouts the life of the tree can be greatly lengthened. Set the trees at least a foot deeper than they were growing in the nursery and allow to grow in a bush form. The following varieties

have proven successful with us and some of them have proven successful in more severe climates.

Zumbro*

Originated at the Minnesota Fruit Breeding Farm. Very hardy tree, dwarf growing and spreading, vigorous and extremely productive. Fruit large for a cherry reaches one inch in diameter, color nearly black when ripe; flesh, greenish, firm; stone, small and free; quality, excellent, somewhat resembling its sweet cherry parent. Very fine for sauce and preserves as well as eating when fresh from tree. Season extends through the latter part of August. Fruit hangs well to tree. This is a valuable cherry for home or market use and is considered the most valuable production of the Fruit Breeding Farm towards better fruits for Minnesota.

Howard Lake Cherry*

Originated at the Howard Lake Nurseries, where it was noticed in a row of Rocky Mountain Cherry seedlings. Tree is of a dwarf form, spreading, and a very thrifty grower; very hardy; fruit red, resembling the compass. Very late in ripening. Season, middle of September.

Compass*

Originated by H. Knudson of Springfield, Minnesota. Tree is perfectly hardy and adapted to the cold prairie country of North Dakota and Canada. It seems to do best out here, where it is free from disease and produces a heavy crop every year, starting the second year after planting. Fruit small, bright red and is pleasant for canning or eating out of the hand. This variety will produce under severe conditions where many other varieties have failed.

Early Richmond

The most popular and productive, hardy through the central states. Fruit, dark red, medium to large; an excellent pie cherry. Will thrive and produce in sheltered locations.

Improved Rocky Mountain Cherry*

Extremely hardy in the northern part of Minnesota and Manitoba, where it is found desirable to plant. It naturally grows in a bush form. Fruit black when ripe and has a tart taste. Especially fine for jell. May be used as an ornamental shrub. Adapted to a dry climate and poor soil, where it will thrive and produce an abundance of fruit.

CURRANTS

A good, well known fruit that can be grown anywhere and on any soil that will produce a grain crop. They do best on a rich soil with plenty of mulching and good cultivation. Set in single rows, running north and south. Can be grown between the rows of apple or plum trees in the orchard with good results. Their greatest and only serious enemy is the currant worm which can be controlled by using the regular spray as given under the spray program in this guide on page 14.

Perfection*

A cross between Fay's Prolific and White Grape. A late introduction which combines the good qualities of both its parents. Fruit bright red and large. In quality it is said to be superior to anything on the market and is of a rich mild sub-acid flavor.

Red Cross*

One of the latest introductions. A strong growing variety with long heavy compact bunches. Berry very large, bright red, of

mild and pleasing quality and fine flavor. We consider this as the best currant for the Northwest as it has proven this to us; where we are growing all the other varieties the RED CROSS has always been outstanding in size and production. Berry will average one-half inch in diameter where grown on a good soil. We have had bunches run from six to eight inches in length.

Red Dutch*

The old standard red that is well known and is agreed to be about the best variety of the old list. A red berry of good quality.

White Grape*

Bush vigorous, somewhat spreading, productive; clusters, long; berries, large, of a very attractive cream color, mild flavor and good quality. Especially fine for table use.

GOOSEBERRIES

The gooseberry, like the currant, is a favorite in the northern fruit garden and can be grown with very little attention. They contain a sprightly sub-acid flavor that is not lost in preserving, as is the case with many other fruits. The interest and demand for this fruit is constantly growing. Protect from worms exactly the same as currants.

Carrie*

Originated in Minnesota by the late Wyman Elliot. Pale red, good size, excellent quality and very productive. Very thrifty and healthy grower, very few thorns.

Downing

A popular variety with the market gardener, light green, sweet and fine quality. Berries large and easy to pick. Bush productive.

Houghton*

Very hardy, one of the most reliable varieties, heavy bearer, excellent quality, but rather small. Berries pale red when fully ripe.

GRAPES



This is a fruit that can be grown on any good land, as well here as in some of the states south, with only the additional expense of covering in winter. With the new introduction of the Beta, Alpha and Hungarian this trouble is done away with, as these varieties will withstand the severe winters without covering.

Select a sunny location, a south slope being best, and run the rows north and south planting vines eight feet apart between rows and eight feet apart in the row. Cultivate well during the summer and cut back in fall leaving one main shoot or three or four shoots, depending on the system that you are going to use in training the vines. For the varieties that are to be covered leave one shoot and cut it down to within about three buds of the ground and cover with earth. The second year leave a shoot about four feet in length that is trained along the bottom wire of your three wire fence. In the fall of the third season leave three shoots from the main stock and cut these back to two buds. In the fall of the fourth year you

will leave two buds from each of the shoots left the fall before and three new shoots cut back to two buds along the horizontal main stock which has been left. Continue this practice leaving not over thirty buds formed that season on the whole vine. For the hardy varieties the fan system is about the best, where you leave about four main stocks from the base of the plant and leave your buds which produce the fruit on these shoots. These can be left up on the trellis all winter. Remember, that the fruit is formed on the new growth formed the same season the fruit is picked.

Out of the numerous varieties that we are growing in our nurseries we selected the following as the most valuable to the northern planter:

Beta*

A hybrid of the wild grape, probably crossed with the Janesville. This grape is as hardy as the wild vine found growing, as a native throughout Minnesota. Fruit is of good size, black color and ripens early before the frost cuts the leaves. This fruit is dependable and will give you a crop every year, increasing production as the vines get older. We have picked grapes from vines the first year they were set and have received as high as a bushel of grapes from vines four years from transplanting. Fine for wine and jelly as well as eating, when fully ripe.

Alpha*

A native vine was found growing wild in a woods belonging to the St. John's University at Collegeville, Minnesota. This vine was removed to the vineyard with many others and later selected as having the qualities desired. John B. Katzner of the St. John's University started propagating this grape in 1907. The vine had withstood 18 winters without covering at this location

and is a healthy, thrifty, growing vine, free from mildew, bearing bunches of grapes of large size and good quality. Has proven hardy up near the Canadian border in Minnesota and produces very heavily. Fruit dark blue and especially suitable for wine and can be used for table use, when well ripened.

Hungarian*

A hardy grape that is larger than the Beta and slightly better suited for table use. Thrifty grower and will ripen anywhere in Minnesota. We think this grape is especially valuable for the home vineyard and strongly advise planting some of them. Not quite as hardy as the Beta.

Concord

The most popular and widely grown grape in America. Bunches large, compact; berries, large and excellent quality; skin, tender. Requires covering in Minnesota.

Moore's Early

A very good, early grape that is quite hardy and free from disease. Fruit very large and black of rich flavor and excellent quality. Should be covered in Minnesota.

Brighton

A red grape of fine flavor that ripens fairly early and can be kept in the cellar for a good length of time. Requires winter protection.

Niagara

A magnificent white grape, rank grower and a prolific bearer of beautiful bunches of very large grapes. Berries have a tough skin and good quality. Ripens with the Concord.

RASPBERRIES

This is a native fruit of Minnesota and Wisconsin, where it can be grown under

cultivation with marvelous results. Prepare the soil thoroughly and add plenty of fertilizer, as the raspberry plant will stand plenty of fertility and gives the best results on a rich soil. The method of laying out, most commonly used, is to set plants in rows six feet apart and three feet apart in the row. The space between the rows is kept well cultivated and plants are allowed to sucker up and form a hedge row about two feet wide. The canes which have fruited should be cut out as soon as the year's crop has been removed and the young suckers thinned out so that they stand about a foot apart in the hedge row. Tip back the young canes at this time to induce them to form laterals, which produce the fruit the following year. Great care should be used in planting or you will have poor success. There is a bud at the top of the root from which the plant starts growing. First, be careful not to injure this bud, which may be noticeable and may not; depending on how far the plant is advanced. Do not plant too deep or too shallow, but plant so that this bud, which is near where the first roots start on the stock, is not covered with over one inch of soil and at the same time is covered with some soil. If these directions are carefully followed you will have success in growing raspberries.

Latham (Minn. No. 4)*

Originated at the Minnesota Fruit Breeding Farm. This variety seems to have all the necessary requirements for a red raspberry. Does not require winter protection. Plants vigorous, canes tall, nearly thornless, reddish in color, upright; berries, rich red in color, large, firm, holds up well under shipping and ripens evenly over a long season. Matures about one week later than the King. A valuable commercial variety because of its hardiness, productivity, and quality. Suckers freely.

King*

Many of the leading fruit growers consider this one of the best of the early red raspberries. Berries large and attractive, bright red in color and good flavor. Ripens with the earliest and is firm enough to ship well. Canes healthy, productive and hardy. Suckers freely.

St. Regis

This comes the nearest to being an ever-bearing raspberry and in favorable seasons will produce fruit continuously throughout the summer. Berry is red, of good size, sweet, and fine flavor. Suckers freely.

Ohta*

Originated by Professor N. E. Hanson of Brookings, South Dakota. Will stand 40 degrees below zero out on the open prairie without winter protection. Fruit of medium size and very good quality. Suckers freely.

Columbian

A very large, dark red or purple variety. Canes are heavy and grow very rank. Does not require winter covering in central part of Minnesota. Fruit is of good quality and very fine for canning. Resembles the black varieties in that it does not sucker. Produces heavy where many other varieties fail. Especially recommended for the home fruit garden.

Older

The hardiest of the black cap raspberries and will survive the winters without covering in central Minnesota. This is the most reliable black raspberry for the northern planter and produces heavy crops of a good quality berry that is especially fine for table use and canning. Does not spread by suckering.

BLACKBERRIES

The blackberry is a native fruit of the northern states and should be found in every home fruit garden. Set plants three feet apart in the row and rows eight feet apart. Cultivate and prune the same as the raspberry. Does best on a sandy soil and should have winter protection. The best covering is soil laid over the canes which are bent over by spading down on one side of the plant.

Ancient Briton

The hardiest of the blackberries will survive the winters without covering in most places in Minnesota. A reliable market variety of medium size and best quality. This is the only variety we are entering as we believe it to be the hardiest and best for the planters of the Northwest.

DEWBERRIES

The dewberry is a dwarf trailing form of the blackberry. It is easily covered for winter protection because of its growing habit. The flavor of this fruit is something different and makes a sauce that cannot be surpassed in richness and quality.

Lucretia

The hardiest and most widely planted variety. A strong grower and exceedingly productive. Fruit large, luscious and sweet, glossy black; ripens middle of July in most localities. Set in rows six feet apart and three feet in the row.

STRAWBERRIES

A native fruit of the Northwest and the first to ripen. Plant in the early spring and lay out the bed in rows four feet apart and plants from one to two feet in the row. When plants are received, open the package

and place in a pail that contains a thick inixture of soil and water. Take one plant out at a time and set with the crown of the plant even with the surface of the soil. It is very important to pack the soil around the plants firmly to exclude the air and give the fine fiberuous roots a chance to come in contact with the soil. Cultivate and hoe the first summer. Keep the young plants in a well matted row. Pick off the blossoms the first year on the June bearing varieties and with the everbearing keep picked off until the middle of August. Cover the bed with a few inches of clean straw after the ground has frozen. In the spring rake off the straw and leave between the rows. This will keep the fruit clean and at the same time aid the pickers.

There are two groups of strawberries, the perfect and imperfect. It is necessary to plant some perfect variety with the imperfect to make them bear fruit. We are not including any imperfect varieties in the following list as we fail to see the advantage of planting them, when we have so many good, perfect varieties.

Senator Dunlop*

This is an old standard June bearing variety, that has made a wonderful record. Fruit large, roundish, rich dark red color, firm and of good quality. A favorite with the commercial growers as well as the home fruit garden as it will stand shipping and is excellent for canning. Perfect flowers.

Minnehaha*

A June bearing variety originated at the University of Minnesota Fruit Breeding Farm. This plant is readily picked out from all other varieties by the strong, heavy, thrifty growth of its stems and leaves. Fruit is large, firm, medium red in color and of good quality. A very productive

variety that is receiving great favor among commercial growers. Perfect flowers.

Progressive*

Everbearing variety, that has withstood the severe tests of many years and is still holding its own as one of the best. Plants very productive and thrifty growers, adapting themselves to severe conditions and producing a crop all summer long. Fruit of good quality and a rich red color. We have picked strawberries of this variety here in our nurseries as late as the 7th of November. Plant some of these and you will have fresh fruit all summer. Flowers perfect.

Duluth (No. 1017)

Everbearing variety, originated at the Minnesota Fruit Breeding Farm. Foliage heavy, leaves, medium size, dark green, covering and partially protecting the blossoms. Fruit medium size, conic, dark red, with seeds slightly raised and red when fully ripe. Flesh red, moderately juicy, fairly firm, slightly sub-acid. Good quality; spring crop late. Produces a heavy crop both spring and fall. Especially recommended when the hill system is used. Perfect flowers.

VEGETABLES

Asparagus*

(Barr's Mammoth)

This is the first vegetable that can be used for table use in the spring. Plant in beds one by two feet apart. Use plenty of well rotted manure and work it into the soil. Cover the bed with manure or well rotted straw to secure long white shoots. There is nothing easier to grow, and every farmer should have a supply of it in his garden.

PLANTING PLAN FOR IMPROVEMENT OF HOME GROUNDS
HOWARD LAKE & VICTOR
NURSERIES

Paul Eddy, Landscape Architect

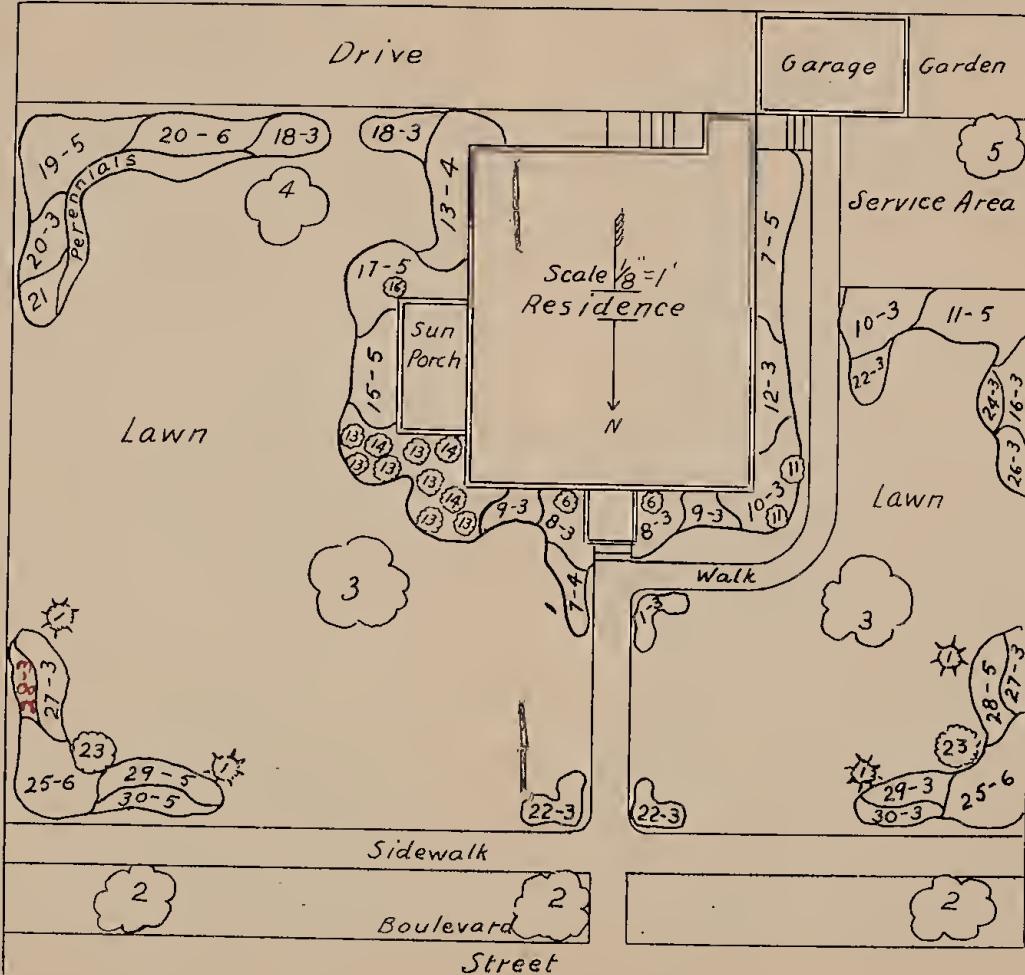
PLANTING KEY

First number in each group on plan indicates variety of plant; second number denotes quantity of that variety in that group; single number indicates individual plants.

1. Colorado Blue Spruce.
- 2 American White Elm.
3. Mountain Ash.
4. Basswood.
5. White Ash.
6. Caragana.
7. Coral Berry.
8. Ash Leaf Spirea.
9. Snowberry.
10. Morrow's Honeysuckle.
11. High Bush Cranberry.
12. Lemoines' Syringea.
13. Bridal Wreath.
14. Lilac.
15. Cotoneaster.
16. Syringea.
17. Hydrangea P. G.
18. Hills of Snow.
19. Tartarian Honeysuckle.
20. C. L. Elder.
21. Golden Elder.
22. Japanese Barberry.
23. Purple Leaf Plum.
24. Spirea Antony Waterer.
25. Bugosa Roses.
26. Golden Syringea.
27. B. T. Dogwood.
28. Spirea Bumalda.
29. Snowball.
30. Spirea Thunbergii.

(Plan on Pages 36 and 37)

PLANTING PLAN FOR IMPROVEMENT OF HOME AND GROUNDS



Pie Plant*

A well known, old garden favorite that supplies the first sauce of the season. Plant three by six feet in a rich soil.

Horse Radish*

A well known, popular plant that should be planted in the spring. Roots can be kept in the cellar and used when desired throughout the winter. Plant rows three feet apart and six inches in the row.

SHELTER BELTS

Uses of a Windbreak

1. To protect the fruit garden and orchard from the cold winds of winter and the hot dry winds of summer. The feeding roots, which are near the surface of the ground, must be protected from variable changes to give the plant or tree a good, early start in the spring.

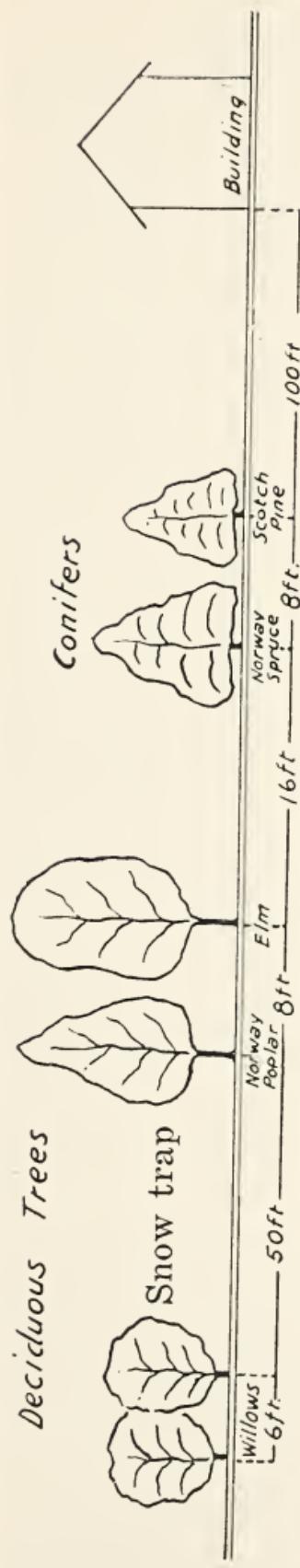
2. To protect the live stock, by shutting off the cold wind and avoiding drafts, dairy cows will give more milk. Many diseases are avoided, such as distemper of horses and sheep. Hens will lay more eggs if given a protected place to exercise. Less feed is required to winter the stock.

3. To protect the buildings—less fuel being required to keep the house warm. Buildings will last longer if given protection.

4. Protection to the crops. Causes snow to cover the fields in winter and protects the crops from the hot drying winds in the summer.

Planting and Care of a Windbreak

Cultivate until the 1st of August. Plant more than one variety as drought, insects or diseases may destroy the planting if only one variety is used.



22 Cross section showing the use of willows, as a snow catch, and the open space for the snow trap.

By using the above system of planting you are insured of a satisfactory windbreak. Willows are the best for a snow catch, as to the other varieties, there are deciduous trees as the boxelder, ash, soft maple, and poplars that can be used. The evergreens, best for windbreaks, are the Arbor Vitae, pines and spruces, most any of these varieties can be used and selected as to adaptability to the soil and climate.

EVERGREENS

This popular tree is the most useful of any for protection in winter as a windbreak and for ornamental plantings. They are a trifle more expensive than the deciduous trees and require more care in transplanting. When the right kinds are planted and given the proper care, they are the most useful trees we have in our northern climate. We feel, that by growing and selling evergreens for windbreaks and ornamental purposes, we are giving the people of this section of the country a great service. There is absolutely no excuse for leaving our homes without the winter cheer of their warmth and beauty. In planting set in rows eight feet apart and eight feet in the row, alternating the plants in the row. The great secret in handling evergreens is to keep the roots moist at all times from the time they are dug until planted. Pack the soil firm about the roots to prevent trees from swaying in the wind.

Observe the following rules and you will have success in setting evergreens.

1. Do not expose roots to the air.
2. Prepare a large pail or tub full of mud about the thickness of heavy paint. Place the trees with their roots in the mud.
3. After the holes are prepared take the tub, with trees on a stone boat, and remove one tree at a time from tub and plant at once.
4. Use fine moist soil next to the roots and press it firmly about the roots. Continue tramping soil until tree is solid and cannot be pulled out then leave some loose soil on top. Tree should be set a little deeper than they stood in the nursery.
5. Cultivate the ground all summer and keep free of weeds and grass.
6. Do not use water or manure.
7. Keep out all stock except chickens.

8. It takes but a couple of minutes to kill an evergreen if the roots are exposed to the sun or air.

Arbor Vitae American* (Thuya Occidentalis)

One of our most beautiful evergreens useful for screens, hedges or windbreaks. Especially adapted to moist and sheltered locations. Can be used for a low hedge or as specimen trees as it will stand shearing. 20 to 30 feet.

Arbor Vitae Pyramidal (T. Pyramidalis)

A densely branched columnar form. Does not require trimming. A very valuable variety for ornamental plantings, where a columnar effect is desired. 20 to 30 feet.

Arbor Vitae Compacta (T. Compacta)

Dwarf and compact in its growth. Good for outside border in evergreen groups. One of the most pleasing types of tree that everybody likes. From 4 to 6 feet.

Black Hill Spruce* (Picea Canadensis)

A native of the black hills of South Dakota and the hardiest form of the white spruce. A wonderful tree for lawn planting or windbreak. Grows a little slower than the Norway Spruce, but every inch of it is a dark, rich green. It is easy to grow and resists drouth wonderfully. This tree is especially noted for its compact growth which makes it desirable for individual plantings. 30 to 40 feet.

Colorado Green Spruce* (*Picea Pungens*)

This is the most striking of the ornamental evergreens and is a native of the Rocky Mountains. A dense growing, symmetrically, pyramidal tree with stiff foliage, needles are borne very thickly on the stems.

Select Colorado Blue Spruce* (*Picea Pungens*)

These trees are selected from beds of the Colorado blue spruce, because of their light shades which makes them shine out on a lawn as if frosted with silver. These trees are very rare as we only get a very few of this type from beds containing a thousand plants. This makes them high priced. When delivered in the spring all look alike, and it takes a year or two, after transplanting, for the shiners to get back their silvery plumage. 30 to 40 feet.

Bull Pine* (*Pinus Ponderosa*)

This wonderful tree is a native of the Bad Lands of western North Dakota, where it was found growing under severe conditions. This tree grows to saw-log size under conditions where ash and cottonwood will not thrive. We feel justified in recommending this variety of evergreens to the people living out on the prairies of North Dakota and western Minnesota. There is an absolute certainty that it will make a good windbreak on any land that will produce a farm crop south of the Manitoba line. 30 to 40 feet.

Mugho Pine* (*Pinus Mugho*)

A low and spreading grower, that is very useful in lawn planting. Makes a very attractive hedge, that can be controlled by

pinching back the terminal buds. Valuable for planting on rocky hill sides or among stones. Does well on any good garden soil. 5 to 6 feet.

Norway Spruce (Pices Excelsa)

A very fast growing tree, that is especially good for windbreaks on a soil that contains a reasonable amount of moisture. A handsome tree with its graceful habit and dark green foliage. 30 to 50 feet.

Red Cedar* (Juniperus Virginiana)

This is a well know tree throughout the Northwest. It is of conical form and quite regular, densely branched, the foliage being thick and of a rich deep green. Bark and branches are reddish brown. In fall the branches are thickly hung with pretty blue berries. This tree will stand clipping and is especially desirable as an ornamental in the lawn or used as a hedge. 25 to 30 feet.

Scotch Pine* (Pinus Sylvestris)

A fast growing tree that is resistant to drouth and especially suitable for wind-break planting on the prairie. It is just as easy to grow as the box elder, with some care used in planting. A very attractive tree with its dark green, dull foliage. 40 to 50 feet.

White Spruce* (Picea Alba)

Compact, upright, long lived, retaining its branches to the ground, drought-resisting. Color, light green to glaucous blue. Native and very hardy. 60 to 70 feet.

FOREST TREES

For Windbreaks, Wood Lots and Ornamental

The prairie farmer needs a wood lot to supply him with fuel, poles posts and

other various uses. Almost every farm has a piece of land that is not adapted to farm crops that will produce timber economically. Such groves should be planted four feet apart each way to encourage a clean, straight growth and to shade the ground in a short time. An acre planted in this way will require two thousand seven hundred any twenty trees. Stop and think, have you a piece of ground on your farm that is not producing. If you have, why not get some returns from this land by planting a wood lot?

American Elm* (*Ulmus Americana*)

The noblest and most dignified tree in the world for boulevard planting. Broad arching branches with splendid dark green foliage. One of the most useful timber, as well as ornamental trees. 60 to 75 feet.

White Ash* (*Fraxinus Americana*)

Useful for parks, street or lawn plantings, as well as a great forest tree, growing to 80 feet in height with a straight, clean trunk. For dry soils and on the prairies plant a good number of ash. It is not only the hardiest but makes the most useful timber of our forest trees.

Box Elder* (*Acer Negundo*)

A fast growing tree that is especially useful where protection is needed in a short time. Adapted to the prairie where it will be sure to grow and give satisfactory returns. Useful for mixing in with more valuable trees, as it grows fast while young and forces the slower growing trees to make a clean, straight stem. 40 to 50 feet.

Norway Poplar* (*Populus Carolinensis*)

This tree is known as the sudden saw log, as it is the most rapid grower of them

all. It wastes the smallest amount of wood in branches and thus maintains the size of the log well up into the tree. Trees planted 14 years are 17 inches in diameter and 55 feet tall. The grain of the wood is straight and splits easily. Does not shed cotton.

Soft Maple* (*Acer Dasycarpum*)

A rank growing tree suited to deep, moist soils. Especially good for fire wood and if trimmed to avoid crotches that split down in heavy winds, it becomes one of the most graceful and beautiful trees of the north. 40 to 50 feet.

THE WILLOWS

Laurel Leaf Willow* (*Salix Pentandra*)

On the western prairie this is the most popular willow, as it will withstand the dry air conditions. Very fast growing and will furnish shelter and fuel in a short time.

Foliage of a deep, glossy green. Useful in landscape work for screening and color effect. 10 to 20 feet.

Russian Golden Willow* (*Salix Vitellina Aurea*)

A very popular willow. Branches profusely, making a denser shelter than any other tree. Especially useful as a snow break around the outside of the windbreak. Should be planted about fifty feet from the main windbreak. A rapid growing tree with a rich golden bark. Also useful for screen plantings on estates and parks.

SPECIAL ORNAMENTAL SHADE TREES

European White Birch* (*Betula Alba*)

Especially suited to grouping among other varieties of trees. Very beautiful with its white bark and finely divided spray for winter or summer effect. 50 to 60 feet.

Catalpa (*Catalpa Speciosa*)

A fine ornamental tree for lawn planting. Has a white flower in July, followed by long slender pods. The mammoth, heart shaped leaves of light green color make it very conspicuous and different. A very fast growing tree. 50 to 60 feet.

Black Locust* (*Robinia Psaudacacia*)

A hardy, thrifty growing tree, that will thrive in any location. Foliage is light and cut leaf. Tree is fragrant with panicles of white flowers and highly ornamental. Valuable for planting where quick results are desired. 40 to 60 feet.

Mountain Ash* (*Sorbus Aucuparia*)

Bears large clusters of fragrant flowers, that are followed by handsome red berries that hang on the tree all winter. A small sized, shade tree, that is one of the cleanest, and can be planted on most any small sized lot. It is desirable to plant a shrub on the south side of this tree to prevent the trunk from becoming injured by sunscald.

Linden* (*Tilia Americana*)

One of the most reliable, hardy and drouth resisting of shade trees. Has fragrant blossoms in July. Foliage dense with large heart-shaped leaves. Useful for lawn and street planting. 40 to 60 feet.

Hard Maple* (Acer Saccharum)

The hard or sugar maple is one of the most symmetrical and well rounded trees native of America. A straight grower, vigorous, stately, inclined to form a spreading head when given plenty of room. A real tree for street planting, home grounds or parks. Foliage, dark green, changing to orange and red tints in the fall. 40 to 60 feet.

Bolle's Poplar*

(Populus Alba Bolleana)

This splendid, upright growing, silver leaf poplar resembles the Lombardy in growth, but is more desirable as it is longer lived. A tree of lofty habits, suitable for tall screening and architectural emphasis.

WEEPING TREES

Niobe Weeping Willow*

(Salix Niobe)

A golden barked willow of decided weeping habit, branches weeping from its own stem from base of tree to the top. Professor Hanson, of the South Dakota Experimental Station, introduced this tree from Russia.

Cut Leaf Weeping Birch*

(Betula Laciniata Pendula Gracilis)

One of the most beautiful and desirable trees for the lawn, with delicate cut foliage. Bark is silvery white, forming a contrast with the foliage. 30 to 50 feet.

Camperdown Elm*

(Ulmus Glabra Camperdownii)

A remarkable, picturesque, weeping tree, that extends its branches horizontally until

it forms a complete arbor. It does not grow over 15 feet high, while the branching head covers 18 feet or more.

NUT TREES

Trees that are valuable as timber and at the same time produce nuts which can be sold at a profit. Many farms contain land that would be far better planted to nut trees, than anything else, and would pay better than farm crops.

Horse Chestnut (Aesculus Glabra)

A strong and rapid growing tree, that is especially suitable for lawn planting. White fragrant flowers in May. 15 to 30 feet.

Butternut* (Juglans Cinerea)

This lofty, spreading tree is valuable for its tropical appearance as a lawn tree, beautiful wood, and its nuts, which are large, oily and nutritious. 70 to 90 feet.

Black Walnut* (Juglans Niagra)

Lofty height and shapely crown, with beautiful compound foliage consisting of thirteen to seventeen leaflets. Wood is very rare and valuable. Bears large nuts that sell good on the market. 80 to 100 feet.

LANDSCAPE SERVICE DEPARTMENT

The HOWARD LAKE & VICTOR NURSERIES are in a position to give intelligent advice to all who are interested in ornamental plantings.

We claim to be one of the few nurseries in this section of the country that can give you the proper service in landscaping your home.

We plan and design your grounds, furnish the plant material, grown in our nur-

series, and superintend the planting at an economical figure.

We will assure the complete contract, which is an item of vital importance to the planter interested in securing a satisfactory job. Our object is to give the people of the Northwest the utmost service in making improvements along landscape lines in the most artistic, practical and economical way.

In order to secure the most attractive results in landscaping, the first thing to consider is a carefully prepared plan. This results in the study of the grounds, considering the soil qualities, existing trees, type of house, surrounding properties, walks, drives, slopes, and most important of all, the owners personal wishes and ideas.

We are in a position to give you professional, landscape architectural advice and make plans for any character of ground improvements.

OUR TERMS

In case you take the proper measurements of your grounds and send them in to our office, we will make out a complete plan and send it to you free of charge with the understanding that you use stock from the Howard Lake & Victor Nurseries in planting your grounds. Write for one of our landscape charts, which will give you the information which we require in the form of measurements, etc., in drawing up a satisfactory plan of your grounds.

In case it is necessary for our Landscape Service Man to make a special visit to the client, we make a nominal charge, 10 per cent of the amount of the order for the plans and services which we give. For example, when the material for planting the grounds amounts to \$150.00 the plans and personal service would come to \$15.00. For

smaller grounds very satisfactory plans can be made through correspondence, but on larger places as school grounds, parks, large private residences, etc., we recommend a personal visit from our Landscape Service Man.

AN INVITATION

We extend a personal invitation to all our friends and patrons to visit our nurseries and make their own selections of plants and trees, which will be tagged, carefully dug, and shipped to you at the proper time for planting.

EXPLANATION

Attractive home grounds are not attained by the indiscriminate planting of trees, shrubs and flowers about the yard. No matter, how beautiful each specimen may be, in order to secure a harmonizing effect, it is necessary to properly place the proper plants according to pre-arranged plan, which takes into consideration the practical and esthetic requirements of each place.

HARDY ORNAMENTAL SHRUBS

Almond (*Amygdalus*)

Early flowering shrubs, gaily in full bloom before the leaves appear, with beautiful double flowers of rose or white, snuggling tight to the twigs. Double white and double pink. 4 to 5 feet.

Barberry, Japanese* (Berberries *Thunbergii*)

A Japanese shrub, that does not carry the rust and is especially useful for low hedging and group plantings on the lawn. A very attractive, dwarf growing shrub with thorny twigs. Dark green, fine foliage with red berries that hang on all winter. 2 to 3 feet.

Buckthorn* (*Rhamnus Catharticus*)

The most commonly used hedge plant, that will thrive well in a poor soil and under exposed conditions. Foliage, the darkest green, very dense and branches somewhat thorny. Grows to 15 feet in height, but can be kept trimmed to any height and makes a dense hedge.

Caragana* (*Siberian Pea Tree*)

A very hardy shrub that will do especially well on a light sandy soil. Has a fine foliage of a light green color. Yellow, pea-like blossoms are borne early in the season. Make a very attractive hedge, that can be trimmed to any height. 6 to 10 feet.

Coral Berry (*Symporicarpus Vulgaris*)

A very attractive, dwarf growing shrub that has a luxuriant foliage. Bright red berries are held well into the winter. 3 to 5 feet.

Cranberry High Bush* (*Viburnum Opulis*)

Very similar to the snowball in appearance. Carries large bunches of crimson berries, which enliven the late summer and persist on bare branches into the winter. Useful for screening and in contrast with other shrubs planted in groups. 8 to 10 feet.

Crab (Bechtel's Double Flowering)

Blossoms early before the leaves appear. Flowers are double, resembling little roses. A very interesting and beautiful tree. 12 to 15 feet.

Cotoneaster* (*Acutifolia*)

A comparatively new shrub that is especially useful for low hedging or as a speci-

men shrub. Has dark green leaves with a glossy appearance.

Currant*—Yellow Flowering (*Ribes Aurea*)

This is the old fashioned, fragrant currant that blooms early in the season and is useful in landscape work. 5 to 8 feet.

Currant*—Alpine (*Ribes Alpina*)

Useful for low hedges and border plantings. Has dense, upright racemes of golden flowers in May. Fruit, deep scarlet. 2 to 4 feet.

Dogwood*—Red Twigged (*Cornus Stolonifera*)

The bark is a dark, rich red and contrasts beautifully with the darker tone of other trees and shrubs. Flowers in dense cymes, followed by white berries. Makes a good hedge or screen, 6 to 8 feet.

Dogwood*—Varigated (*Cornus Sanguinea*)

One of the most desirable shrubs with varigated foliage. Leaves are broadly margined with white and some are almost entirely white. Bark is bright red in winter. 4 to 5 feet.

Elder*—Cut Leaf (*Sambucus Nigra Lanciniata*)

Each leaf is cut and divided so as to give the appearance of a fern. Of a drooping habit and one of the handsomest shrubs in cultivation. 6 to 8 feet.

Elder—Golden (*Sambucus Aurea*)

Bright, golden, yellow leaves, the color being distinct and permanent all summer.

Of vigorous spreading habit. One of the best golden foliaged shrubs. 5 to 7 feet.

Hedge-wood* (Siberian)

A new introduction of Professor Hanson of South Dakota. This is one of the best hardy hedges that will stand extreme clipping. Suitable for a very low hedge of attractive appearance. Starts growing very early in the spring and the foliage hangs on late in the fall.

Honeysuckle*—Tartarian (*Lonicera Tartarica*)

Has very fragrant blossoms in early June. Desirable for use in shrubbery border or screen, as well as specimen shrub. Red, white and pink varieties. 6 to 8 feet.

Honeysuckle*—Morrows Bush (*Lonicera Morrowii*)

A Japanese variety, grows more spreading than the other honeysuckles. The pure white flowers change to yellow and are followed by bright red berries in August that hang on until winter. 4 to 6 feet.

Hydrangea Paniculata Grandiflora

The showiest of all autumn flowering shrubs. Bearing immense heads of creamy white flowers which turn a rich pink at the approach of cold weather. Flowers may be picked and kept as a winter bouquet, if left on the shrub they hang on most all winter. 4 to 6 feet.

Hydrangea Aborescens (Hills of Snow)

The latest addition the summer flowering shrubs, coming into bloom after all the earlier ones have passed away and having the appearance of "Hills of Snow" in the middle of the summer. Does well in the shade. 3 to 5 feet.

June Berry* (*Amelanchier Botryapium*)

Bears white flowers in late April, completely covering the shrub before most of the shrubs or trees have started growing. The dark red berries, which are ripe in mid-summer, are very ornamental and are useful for pies or sauces. 4 to 5 feet.

Lilic*—Purple (*Syringea Vulgaris*)

This is the oldest and best known type of lilac. From it have sprung most of the newer varieties. Excellent for hedges, screens and group planting. Should have plenty of sunlight to bloom freely. 10 to 12 feet.

Lilac*—White (*Syringea Alba*)

Same growing habits and can be used for same purposes as above.

Lilac*—Persian (*Syringea Persica*)

A more graceful form of lilac with finer and more pointed leaves. Branches, slender and flowers bright purple. 8 to 10 feet.

Lilac Madam Lemoine*

A French grafted lilac that will start blooming at once and bear long heads of gorgeous, pure white flowers. 8 to 10 feet.

Matrimony Vine (*Lycium*)

This shrub has a special purpose in landscape plantings. It has long trailing branches, which grow from 6 to 10 feet, and makes a very effective plant to place at the top of a terrace, so that the branches can overhang a wall. It has purple flowers which are followed by attractive red berries.

Privet* (Polish)

At last we have a privet, that is entirely hardy and will withstand the severe climate of the Northwest. This is a new introduction from Poland and has proven itself to be one of the most attractive hedge plants for the Northwest. We have had this plant growing in our nurseries for a number of years and think more of it every year. Foliage is of light green. Branches close to the ground and makes a very dense, compact and even growing hedge. It has everything a good hedge plant should have. 5 to 8 feet.

Plum—Purple Leaf

A large shrub or small tree with shining, purple leaves, that may be used to color the shrubbery plantings. 10 to 12 feet.

Plum—Double Flowering (*Prunus Triloba*)

Bears a profusion of delicate, pink, rose-like blossoms, appearing just before the leaves unfold. 8 to 10 feet.

Russian Olive* (*Elaegnus Augustifolia*)

Leaves of a light silvery color, shaped like a willow. Has a small, very fragrant, yellow flower. Is suitable for hedges, screens, as well as individual specimens. Gives a very good foliage in contrast with other trees and shrubs. 12 to 18 feet.

Snowberry*—White (*Symporicarpus Racemosus*)

A very graceful drooping shrub that can be used in shady places in front of higher shrubs. Has large, white, wax-like berries that hang on most of the winter. 3 to 5 feet.

Snowball* (Viburnum Opulis Sterilis)

An old, well known favorite, that is susceptible to plant lice, which may be controlled by covering the plant, including the underside of the leaves, with soapy water or by using a nicotine spray. 6 to 8 feet.

Spirea Anthony Waterer

A dwarf growing variety that blooms most all summer. Flowers are dark red to pink and very showy. Can be used in front of higher shrubs or as a low shrubbery border. 2 to 3 feet.

Spirea Arguta

Blooms two weeks earlier than the bridal wreath. When in bloom each branch is completely covered with a wealth of minute, pure white flowers. 3 to 5 feet.

Spirea*—Golden (S. Aurea)

Foliage of a bright, golden color and finely shaped. This is one of the finest golden leaved shrubs useful for contrasts with other shrubs. Flowers white, resembling small roses. 6 to 8 feet.

Spirea*—Ash Leaved (S. Sorbifolia)

A vigorous growing shrub with dull green foliage, resembling that of the mountain ash. White flowers, borne in elegant long spikes. 6 to 7 feet.

Spirea Billardii*

A strong grower with dull green foliage and dense spikes of bright pink flowers. Blooms in July and August. 4 to 5 feet.

Spirea Callosa Alba

Much like the Anthony Waterer, except that it bears white flowers throughout the summer. Dwarf growing, 2 feet.

Spirea Froebeli

Dwarf growing, similar to Anthony Waterer with broader leaves. Bright, crimson flowers in dense corymbs during July and August. 2 feet.

Spirea Thunbergii

One of the finest spring blooming, small shrubs. Flowers are white, borne along the entire length of the branches, bending them down in graceful curves. Foliage, fine and willow-like, that turns orange scarlet in autumn. 3 to 4 feet.

Spirea Van Houttei* **(Bridal Wreath)**

A most graceful and attractive bush the year around and one that will stand the most severe conditions. This is a well known plant and is one of the best for northern planters. White wreaths of bloom in June. Can be used for individual specimens, grouping, foundation planting, and hedging. 4 to 6 feet.

Syringea—Golden **(Philadelphus Aureus)**

A compact shrub with bright yellow foliage, which retains its color throughout the season. Very effective in grouping with the darker foliaged shrubs. 3 to 5 feet.

Syringea—Mock Orange* **(Philadelphus Coronarius)**

The old and well known Mock Orange. A graceful, upright bush, with long branches, covered with dark green foliage. In June completely covered with showy, pure white flowers of a delightful fragrance. Used for screening, specimen shrubs, or in the shrubbery border. 8 to 10 feet.

Springea—Lemoine (*Philadelphus Lemoineii*)

Much the same as the other syringas, except that its branches, foliage and blossoms are smaller. Graceful, drooping habit, and one of our very best shrubs. 4 to 5 feet.

Weigelia Rosea

An elegant shrub with fine, rose colored flowers. Erect in habit and with attractive foliage. Best known and most popular weigelia. 4 to 5 feet. This shrub should be planted in sheltered locations to do its best as it is quite tender.

Shepherdia Argentea* (Buffalo Berry)

A strong, sturdy, shrub, native of the Dakotas and Manitoba. Stout, thick branches with spurs and thickly covered light green foliage. A good vigorous shrub for hedging, where close clipping is not required and valuable on poor soils. 6 to 8 feet.

CLIMBING VINES Engelmann Creeper* (*Ampelopsis Engelmannii*)

A vine that clings to stucco, brick or stone without any assistance. The most hardy and desirable of any for covering walls, porches, screens, or any thing that it is desirable to have a vine climb on. Leaves turn a crimson color in the autumn. Grows very fast, the vines shooting up for 20 feet in one growing season.

Honeysuckle Scarlet Trumpet* (*Lonicera*)

The old garden favorite that blooms all summer, producing the most brilliant,

orange scarlet flowers. Foliage a rich, glossy green. Useful for screen on lattice work about the porch or in the garden. This beautiful flowering vine should be found at every home.

Honeysuckle*—Hall's Japan (*Lonicera Halleana*)

Flowers white with intermingling of yellow. Extremely fragrant and most satisfactory. Will do well in partial shade and is used extensively as a ground cover.

Bitter Sweet* (*Alastrus*)

A climber of distinctive growing habit for it fairly clutches its support in spiral turns as it grows upward. Very good for use on pergolas, archways, bird houses supporters, etc. Its showy orange red berries are very effective in the fall and winter landscape, and may be used as house decorations in winter.

American Ivy* (*Ampelopsis Quinquefolia*)

This vine is commonly called wood bine and is a native of the north woods. It has deeply cut leaves which turn a beautiful crimson in the fall, fine for covering fences, walls, trees and slopes.

Clematis Jackamanii

Bears large, brilliant, purple flowers. Requires winter protection and likes a shady location.

Clematis Paniculata

This white flowering clematis is one of the most popular and is one of the most hardy of the clematis. Blooms late in the season and requires winter protection.

Clematis Henryi

Light red flowers of large size. Requires winter protection.

ROSES

Our roses are field grown, large stock and will bloom the first year after planting. Roses require a fertile black loam soil and plenty of sunshine and moisture. Cultivate continuously and fertilize every year. The best time to plant is the early spring and the plants should be cut down to within six inches of the ground as soon as they are planted. Plant a few inches deeper than they were growing in the nursery. The tender varieties require winter protection and the best method is to tie up the vines together and wrap with burlap or some cloth, then lay them down and cover with a foot of dry straw. This method will insure your plants coming through the winter in good shape. Hold the straw in place with boards or a wire netting. In the spring uncover when the trees start growing and cut the tips back to the new fresh wood. Diseases and insects are best controlled by keeping the bush in a good, thrifty, growing condition. The red spider can be controlled by spraying with cold water and keeping the bushes quite damp. Mildew can be controlled by dusting the bushes with sulphur.

Hardy Rugosa Roses*

These new hybrid Rugosa roses can be grown all over Minnesota and the Dakotas without winter protection. This beautiful rose will take the place of many of the less hardy varieties as the varieties that we are offering are all of the large, double kinds. Should be used in groups in the corners of the lawn, etc. Also makes a very attractive,

informal hedge that will give the lover of roses an abundance of bloom all summer.

Double Red Rugosa—A deep red, very large and fragrant. Foliage of a dark green.

Double White Rugosa—The purest, paper white of large size and very heavy and fragrant. Foliage of a rich green. Makes a perfect low hedge, full of bloom all summer.

Double Pink Rugosa—A rosy pink color, extremely fragrant, good size, perfectly double; foliage, dark, rich green.

TENDER VARIETIES

Nearly all of the old line roses require winter protection. Method of covering is given above. While these roses are classed as tender they are the hardiest and most satisfactory except the new Rugosa roses.

Moss Roses

We handle varieties of the red, white and pink moss roses. The stems are heavy and hold the blossoms quite upright. Flowers very fragrant and coated with a mossy fringe. A very beautiful rose.

Madam Plantier

One of the hardiest June roses. An enormous bloomer and covered with snow white flowers every season without much attention.

Persian Yellow

Bright yellow, small and double. The hardiest and best yellow rose. Does not require winter protection when planted in sheltered places.

Captain Hayward

One of the finest red roses, large blossoms, free bloomer, deliciously fragrant.

Paul Neyron

Deep rose color, good, tough foliage, wood rather smooth. A free bloomer, very desirable as a garden rose.

General Jacqueminot

A strong, vigorous grower and quite hardy. Brilliant, crimson flowers.

Crimson Rambler (Climbing Roses)

Flowers are a bright, cheerful shade of crimson, and the great size of the clusters makes it especially attractive. Flowers double. A rapid grower and one of the best climbing roses.

Excelsa* (Climbing Rose)

A recent addition to the climbing roses and one that is extremely hardy. A gorgeous, intense crimson, double flower. Foliage very thrifty and beautiful.

Dorothy Perkins (Climbing Rose)

A pink climbing rose that is a thrifty grower and quite hardy.

Baby Rambler Roses

A wonderful little rose, that grows in a small, compact bush and is covered with bloom all summer. Very desirable for pot planting in the house. Strictly a bedding plant and requires plenty of winter protection.

Crimson Baby Rambler—This is the hardiest and best of the ramblers. Covered with large trusses of bright, crimson bloom.

White Baby Rambler—Small, white clusters, fragrant.

Pink Baby Rambler—Small, pink clusters, fragrant.

Yellow Baby Rambler—Conspicuous for its bright yellow bloom.

TULIPS* (For Fall Planting)

Plant in a well prepared bed in the fall. Bulbs should be about six inches apart and the top of the bulb three inches below the surface of the ground. Tulips may be left in the ground from year to year and should be covered with a mulch of manure in the fall. After about three years it is advisable to take them up and replant in another location. Should be planted in individual beds or in front of shrubbery. The first to bloom in the spring and a bed of assorted colors will at once become the admiration and envy of the neighborhood. We sell tulips in assorted lots. These are of the best varieties and grow from 11 to 14 inches high. Double and single.

BULBS AND HARDY PERENNIAL PLANTS

Achillea the Pearl*

One of the hardiest and best border plants for exposed locations. White flowers all summer that may be used for cutting. Low growing, about 12 to 18 inches.

Aquilegia* (Columbine)

A fine plant for the boarder or rockery in well drained soils. Large, white flowers with deep blue petals and four long recurved spurs. Foliage very attractive and dense. 12 to 18 inches high.

Bellflower* (Canterbury Bell)

An ornamental garden flower of easy culture. Flowers vary in color between, blue, red, purple and white. Blooms July and August. Two feet.

Bleeding Heart* (*Dielytra Dicentra*)

Long racemes of showy, heart shaped, red and white flowers. Will do well in both sandy and sunny places. Three feet.

Chinese Bellflower* (*Platycodon*)

Blooms from July to September. Forms a dense, branched bush with attractive foliage. Flowers conspicuous, bell shaped, varying in color from pure white to deepest blue. Two feet.

Day Lily* (*Hemerocallis*)

These are excellent plants with grass like foliage and dark, orange colored flowers, borne on long stems. Very hardy, thriving on any good soil and especially adapted to a moist, shady place.

DAHLIAS

Another well known autumn flowering plant. Grows from two to five feet high. Flowers are of most perfect form and vary in color from the most perfect white to the darkest red. The dahlia is not as particular as most other plants and will do very well on a poor soil, where it has plenty of sun light. Plant in the spring in beds or among the shrubbery. Take the tubers up in the fall, after the first heavy frosts, and store in the cellar in dry sand or sawdust.

Double Red—Large, heavy, useful for a background plant where dark colors can be used. We have the cactus dahlia of this color.

Double White—Large, compact flowers of a pure, paper white. Useful for a late fall contrast in color. Useful in the foreground, where lighter colors should be used.

Double Yellow—A very large and conspicuous flower, that is produced in abundance. A color that gives an interesting feature to most any planting.

Hollyhock*—Double (Athea)

Indispensable plant in the garden and border, possessing a character peculiar to themselves, which renders them especially valuable to break up any set effect in the lawn planting. Colors range from a dark red to a perfect white.

Gaillardia*

Conspicuous for its profusion and duration of bloom. The dark, orange colored flowers give a striking and gorgeous effect in the border and are useful for cut flowers. 12 to 18 inches.

Golden Glow*

One of the most attractive, fall blooming perennials for the mixed boarder or massing. Large, double, dahlia shaped, yellow flowers. Four feet.

GLADIOLI

Grow some gladioli for cut flowers. Blooms for two or three weeks, the buds unfolding clear to the tips of the plant. Pull off the lowest blossoms as they wilt. Plant bulbs in spring and store in cellar over winter the same as dahlias. Assorted colors from a dark red to a pure, paper white.

Iris* (Rainbow Flower)

No flower in the perennial boarder surpasses the iris in delicacy of texture and color or is more showy and pleasing in general appearance. They thrive in most any soil and are easy to cultivate. Do well in the shade.

Larkspur (Delphinium)

Well known and valuable perennial plant with ornamental foliage. Free flowering and of easy culture. By preventing the

flowers to seed, the plants will bloom continually until hard frosts.

Lily* (Double Tiger)

Something new to take the place of the old fashioned, single tiger lily. Grows to four or five feet high and produces a large number of bright orange flowers.

Lily of the Valley*

A well known, low growing perennial, that does especially well in the shade. Small flowers of a pure white on spikes, with a charming fragrance.

Plantain Lily* (Funkia)

Flowers in June and July of a pale blue. Glossy, heavy, compact foliage. Flowers borne on tall showy spikes. Does well in the shade and makes a fine border for shrubs. One foot.

Peony* (Peonia)

Peonies succeed admirably in any loamy soil and will do well in partly shaded places. Useful for bordering the walks and drives, as well as for the flower beds. Colors range from a pure white to a dark purple. Some are fragrant. We have selected a few of the best varieties which we are offering:

Double White—Large, heavy, double bloom.

Double Pink—Large double, early blooming.

Festiva Maxima—Large, very double, pure white, center petals fringed with red. Long stems, strong grower.

Phlox* (Hardy)

A well known perennial that fits in most any border planting. Two to three feet. Colors of red, white, pink and white with a pink center.

Shasta Daisy* (*Chrysanthemum*)

Originated by Mr. Luther Burbank of California. Flowers are large, white, with golden center. Have good stems for cutting. Three to four feet. Bloom late in the fall.

Yucca* (*Filamentosa*)

Has stiff, broad, sword like foliage, surmounted by tall handsome spikes of large fragrant, creamy white flowers. Valuable in producing sub-tropical effects. Foliage holds its green color all winter. Three to four feet.

BEDDING PLANTS

Cannas—Bronze and green leaf. Very good for center piece of flower bed. Four to five feet.

Geraniums—For a border to a flower bed. Bloom all summer.

Coleus—Mixed foliage, all colors, for a low border plant around outside of flower bed.

Salvia—Border plant very attractive bloom of a light red.

Vinca Vines—For window boxes around edge of box. Will drape down and give a very attractive appearance.

DISTANCES APART TO PLANT

	Feet apart	or plants apart	Trees per acre
Apples and crabs	20x30		73
Plums and cherries.....	16x20		136
Currants and gooseberries..	4x 6		1,815
Raspberries, red suckering varieties	3x 6		2,420
Raspberries, black and purple	4x 6		1,815
Blackberries	4x 6		1,815

Strawberries	1x 4	10,890
Rhubarb	3x 6	2,240
Asparagus	1x 2	21,780

There are 43,560 square feet to the acre. Divide this amount by the number of square feet required by each plant. For example—if you were planting grapes eight feet apart each way—eight times eight equals 64 square feet. 43,560 divided by 64 equals 681, the number of plants required for one acre.

OUR SALES FORCE ARE TRAINED TO GIVE YOU SERVICE

When you meet a representative of the HOWARD LAKE & VICTOR NURSERIES, you can be sure he knows his business. He has studied the material he is selling and knows what varieties are best to plant and where to plant them. He understands the latest methods of pruning, spraying, planting, and after care of trees and plants, which he is instructed to pass on to his clients. He has received training in landscaping and can give his clients service along this line. Our representatives have received their training through the Howard Lake & Victor Nurseries and the University of Minnesota. Twenty of our salesmen attended the short course given by the University of Minnesota in February, 1925. This shourt course was given for nursery salesmen. Many of our representatives have spent a number of years working in the nursery, while others have received their experiences and education along horticultural lines by practical experience and reading literature sent them from our office. Representatives of the Howard Lake & Victor Nurseries are kept posted on the new varieties and up-

to-date culture methods, as well as landscape improvements. They are instructed not to sell varieties unless they have been proven out to be hardy and have qualities, which would make them valuable to the planter. By leaving your order with one of our representatives you will be sure to receive a quality of stock that is unexcelled and a service which will be of great value to you in securing the maximum results from the stock planted.

**CERTIFICATE OF INSPECTION
ACCOMPANIES EVERY
ORDER**

HELPFUL INFORMATION ABOUT SHRUBS

Botanical Name	Common Name	Color of Bloom	Height	Time of Flowering	Color of Foliage	Habit of growth	For Sun Shade
<i>Amygdalus</i>	Flowering Almond	Pink or White	4-5 ft.	May	Glossy Green	Spreading..	Sun
<i>Berberis Thunbergii</i>	Japanese Barberry	Yellow	2-3 ft.	June-July	Dark Green, Red in Fall	Spreading..	Either
<i>Caragana</i>	Siberian Pea Tree	Yellow	10-12 ft.	June	Light Green	Erect..	Sun
<i>Cornus Alba Elagantissima</i>	Variegated Dogwood	White	4-6 ft.	June	Green Leaves edged with white	Spreading..	Sun
<i>Cornus Alba Siberica</i>	Red Twig Dogwood	White	6-10 ft.	June	Green Leaves, red bark	Spreading..	Shade
<i>Cotoneaster Acutifolia</i>	Same	Pinkish	6 ft.	June	Dark, glossy green	Erect..	Sun
<i>Elaeagnus Augustifolia</i>	Russian Olive	Yellow	6-8 ft.	June	Light Green, almost gray	Spreading..	Sun
<i>Hydrangea Arborescens</i>	Hilis of Snow	White	4-6 ft.	July-August	Green	Spreading..	Shade
<i>Hydrangea Paniculata Grandiflora</i>	Hydrangea	White	4-5 ft.	August	Green	Spreading..	Sun
<i>Lonicera Tartarica Alba</i>	Tartarian Honeysuckle	White	6-8 ft.	June	Green	Erect..	Either
<i>Lonicera Tartarica Grandiflora</i>	Tartarian Honeysuckle	Pink	6-8 ft.	June	Green	Erect..	Elther
<i>Lonicera Tartarica Splendens</i>	Tartarian Honeysuckle	Red	6-8 ft.	June	Green	Erect..	Elther
<i>Lonicera Morrowii</i>	Morrow's Bush Honeysuckle	Yellow	4-6 ft.	July	Green	Spreading..	Elther
<i>Lycium Chinense</i>	Matrimony Vine	Purple	2-4 ft.	All Summer	Grayish Green	Trailing..	Sun
<i>Philadelphus Coronarius</i>	Mock Orange	White	8-10 ft.	June	Dark Green	Erect..	Elther
<i>Philadelphus Coronarius Aurea</i>	Golden Mock Orange	White	3-5 ft.	June	Golden	Erect..	Sun
<i>Philadelphus Lemoinei</i>	Lemoine's Mock Orange	White	7-10 ft.	June	Green	Erect..	Elther
<i>Prunus Trioba</i>	Double Flowering Plum	Pink	6-10 ft.	May	Green	Spreading..	Sun
<i>Pyrus Augustifolia</i>	Betchel's Flowering Crab	Pink	12-15 ft.	June	Green	Erect..	Sun
<i>Prunus Pissardii</i>	Purple Leaf Plum	Pink	6-10 ft.	May	Purple	Spreading..	Sun
<i>Rhamnus Catharticus</i>	Buckthorn	White	10-20 ft.	July	Dark Green	Erect..	Sun
<i>Ribes Aurea</i>	Yellow Flowering Currant	Yellow	5-8 ft.	May	Light Green	Spreading..	Shade
<i>Sambucus Canadensis</i>	Common Elder	White	8-10 ft.	June	Green	Spreading..	Shade
<i>Sambucus Nigra Aurea</i>	Golden Elder	White	6-8 ft.	June	Golden	Spreading..	Sun
<i>Sambucus Nigra Lancinata</i>	Cut Leaf Elder	White	6-8 ft.	June	Green	Spreading..	Shade
<i>Spirea Arguta</i>	Same	White	3-5 ft.	May	Green	Spreading..	Sun
<i>Spirea Anthony Waterer</i>	Same	Red	1-2 ft.	All Summer	Dk. Green, variegated at times	Spreading..	Sun
<i>Spirea Biliardi</i>	Same	Purple	3-4 ft.	July-August	Green	Erect..	Sun
<i>Spirea Callosa Alba</i>	Same	White	1-2 ft.	All Summer	Green	Spreading..	Sun
<i>Spirea Opulifolia Aurea</i>	Golden Spirea	White	6-10 ft.	June	Very Light Green	Erect..	Elther
<i>Spirea Froebeli</i>	Same	Pink	1-2 ft.	June-July	Green	Spreading..	Sun
<i>Spirea Sorbifolia</i>	Ash Leaved Spirea	White	6-7 ft.	July	Green	Erect..	Elther
<i>Spirea Van Houttei</i>	Bridal Wreath	White	4-6 ft.	June	Green	Spreading..	Elther
<i>Symporicarpus Racemosus</i>	Snowberry	Pink	3-6 ft.	June	Green	Spreading..	Shade
<i>Symporicarpus Vulgaris</i>	Coral Berry	Pink	3-6 ft.	July	Green	Spreading..	Shade
<i>Syringa Vulgaris</i>	Common Lilac	Purple	12-15 ft.	May	Green	Spreading..	Sun
<i>Syringa Vulgaris Alba</i>	Common Lilac	White	12-15 ft.	May	Green	Spreading..	Sun
<i>Syringa Persica</i>	Persian Lilac	Purple	6-8 ft.	May-June	Green	Spreading..	Sun
<i>Syringa Persica Alba</i>	Persian Lilac	White	6-8 ft.	May-June	Green	Spreading..	Sun
<i>Syringa Hybrida Madam Lemoinei</i>	French Lilac	White	5-6 ft.	May	Glossy Green	Spreading..	Sun
<i>Syringa Hybrida President Grevy</i>	French Lilac	Light Purple	5-6 ft.	May	Glossy Green	Spreading..	Sun
<i>Viburnum Opulus</i>	High Bush Cranberry	White	8-10 ft.	June	Dark Green	Erect..	Shade
<i>Viburnum Opulus Sterilis</i>	Snowball	White	6-8 ft.	June	Green	Erect..	Sun

